



## Adapting to the impacts of climate change on food security among Inuit in the western Canadian Arctic

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### Abstract:

This study examined critical impacts of climate change on Inuit diet and nutritional health in four Inuit communities in the Inuvialuit Settlement Region, Western Arctic, Canada. The first objective was to combine data from community observation studies and dietary interview studies to determine potential climate change impacts on nutritional quality. The second objective was to address the scale of data collection and/or availability to compare local versus regional trends, and identify implications for adaptation planning. Information was compiled from 5 reports (4 community reports and 1 synthesis report) of climate change observations, impacts and adaptations in 12 Inuit communities (2005-2006), and from a dietary report of food use from 18 Inuit communities (1997-2000). Changing access to, availability of, quality of, and ability to use traditional food resources has implications for quality of diet. Nutritional implications of lower traditional food use include likely reductions in iron, zinc, protein, vitamin D, and omega-3 fatty acids, among others. The vulnerability of each community to changing food security is differentially influenced by a range of factors, including current harvesting trends, levels of reliance on individual species, opportunities for access to other traditional food species, and exposure to climate change hazards. Understanding linkages between climate change and traditional food security provides a basis for strengthening adaptive capacity and determining effective adaptation options to respond to future change.

**Source:** <http://dx.doi.org/10.1007/s10393-010-0344-8>

### Resource Description

#### Communication: ☒

resource focus on research or methods on how to communicate or frame issues on climate change; surveys of attitudes, knowledge, beliefs about climate change

A focus of content

#### Communication Audience: ☒

audience to whom the resource is directed

Public

#### Exposure : ☒

weather or climate related pathway by which climate change affects health

# Climate Change and Human Health Literature Portal

Food/Water Security

**Food/Water Security:** Food Access/Distribution, Nutritional Quality

**Geographic Feature:** 

resource focuses on specific type of geography

Arctic

**Geographic Location:** 

resource focuses on specific location

Non-United States

**Non-United States:** Non-U.S. North America

**Health Impact:** 

specification of health effect or disease related to climate change exposure

Malnutrition/Undernutrition

**Mitigation/Adaptation:** 

mitigation or adaptation strategy is a focus of resource

Adaptation

**Population of Concern:** A focus of content

**Population of Concern:** 

populations at particular risk or vulnerability to climate change impacts

Racial/Ethnic Subgroup, Workers

**Other Racial/Ethnic Subgroup:** Inuit

**Resource Type:** 

format or standard characteristic of resource

Research Article

**Resilience:** 

capacity of an individual, community, or institution to dynamically and effectively respond or adapt to shifting climate impact circumstances while continuing to function

A focus of content

**Timescale:** 

time period studied

Time Scale Unspecified

**Vulnerability/Impact Assessment:** 

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content